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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,574	06/30/2003	Ock-Hee Kim	053785-5131	7327
9629	7590	10/22/2004	EXAMINER	
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			QUARTERMAN, KEVIN J	
			ART UNIT	PAPER NUMBER
			2879	

DATE MAILED: 10/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/608,574	KIM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Kevin Quarterman	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 10-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>0603; 0704; 0904</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-9, in the reply filed on 26 July 2004 is acknowledged. The traversal is on the ground(s) that no undue burden would be placed on the Examiner if both Group I and Group II inventions were simultaneously examined. This is not found persuasive because a reasonable field of search for the non-elected invention is likely to include a search in arts of manufacturing processes, which would not be required for examination of the elected invention. Furthermore, the undue burden to the Examiner has been shown by the different classification of the inventions and the different searches required for the inventions (See MPEP § 808.02).
2. Thus, the requirement is still deemed proper and is therefore made FINAL.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The following title is suggested: --ORGANIC ELECTROLUMINESCENT DISPLAY DEVICE WITH INSULATING LAYER PATTERNS AND METHOD OF FABRICATING THE SAME--.

### ***Drawings***

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference characters "67" and "E" of Figure 4 are not mentioned in the

description. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being obvious over Park (US 2003/0205970) in view of Kubota (US 6429584).

9. The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

10. Regarding independent claim 1, Figure 9 of Park shows an organic electroluminescent display device comprising a first substrate (600) having a plurality of

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pixel regions including a plurality of pixels (p); a second substrate (500) spaced apart and facing the first substrate; a plurality of switching elements and a plurality of driving elements interconnected on the second substrate (Abstract); a plurality of connecting electrodes (510) connected to each of the driving elements; a first electrode (602) formed on an inner surface of the first substrate; a plurality of partitions (606) formed on the first electrode, the partitions being formed along boundaries of neighboring pixels; a plurality of organic light-emitting layers (608) disposed on the first electrode; and a plurality of second electrodes (610) formed on the organic light-emitting layers, each of the second electrodes are independently formed in each of the pixel regions, are separated by the partitions, and are electrically connected to one of the connecting electrodes.

11. Park teaches the limitations discussed above but fails to exemplify a plurality of insulating layer patterns formed between the first electrode and the partitions.

12. Kubota shows in Figure 2 that it is known in the art to provide organic electroluminescent devices with a plurality of insulating layer patterns (3c) formed between a first electrode (3b) and partitions (7). The insulating layer patterns of Kubota provide a separation between the first electrode and a second electrode (9), thereby preventing them from coming into contact with each other.

13. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the organic electroluminescent display device of Park with a plurality of insulating layer patterns formed between the first

electrode and the partitions for preventing the first electrode from coming into contact with the second electrode.

14. Regarding claim 2, Figure 9 of Park shows each of the partitions having a trapezoidal shape such that a first width increases from a bottom portion of the partition adjacent to the first substrate to a top portion of the partition adjacent to the second substrate.

15. Regarding claim 3, Park discloses the first electrode including transparent conductive material (pg. 4, ¶ [0039]).

16. Regarding claim 4, Figure 9 of Park shows the first electrode including a single layered structure having at least one of indium zinc oxide and indium tin oxide (clm 11).

17. Regarding claim 5, Figure 7A of Park shows the first electrode including a dual layered structure (201, 202) having at least one of indium zinc oxide (IZO) and indium tin oxide (ITO), and at least one of calcium, aluminum, magnesium, aluminum-lithium alloys, and magnesium-silver alloys (pg. 3, ¶ [0031]).

18. Regarding claim 6, Park discloses the second electrode formed as a single layered structure having at least one of aluminum, calcium, and magnesium (pg. 4, ¶ [0037]).

19. Regarding claim 7, Park discloses the second electrode formed as a dual layered structure having at least lithium fluoride and aluminum (pg. 4, ¶ [0037]).

20. Regarding claim 8, Figure 9 of Park shows each of the organic light-emitting layers including a hole-carrying layer (608b) adjacent the first electrode and an electron-carrying layer (608c) adjacent to the second electrodes.

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21. Regarding claim 9, Figure 9 of Park shows each of the switching elements and the driving elements including an active layer (502), a gate electrode (504), a source electrode (506), and a drain electrode (508).

**Contact Information**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quarterman whose telephone number is (571) 272-2461. The examiner can normally be reached on M-TH (7-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Quarterman  
Examiner  
Art Unit 2879

kq   
18 October 2004

  
Joseph Williams  
Primary Examiner  
Art Unit 2879